

Serial N . 10/055,542

August 20, 2003

Reply to Office Action of April 22, 2003

REMARKS

This Amendment is submitted in response to the outstanding Office Action wherein the Examiner rejected claims 1 - 9, all the claims in the application. Reconsideration of the application in view of the discussion at the personal interview on August 13, 2003 and the following remarks is respectfully requested.

Prior to discussing the specifics of the Office Action, applicant would like to thank Examiner Peavey for the time, consideration and cooperation offered during the personal interview on August 13, 2003. The substance of the interview is set forth on the Interview Summary prepared by the Examiner. As noted therein, applicant highlighted that the claimed shaft sealing system includes a substantially rigid member which provides a bearing function for the shaft, something absent from the prior art references. In this respect, applicant and the Examiner reviewed the teachings in the Hebard and Greiman references noting that the elements in these prior art references placed into the seal cavities are bushings designed to direct flow of sealing fluid and do not provide the bearing surfaces provided by the close fitting rigid element disclosed and claimed by applicant.

The Interview Summary correctly notes that agreement with respect to the claims was not reached. Applicant proposed to amend the claim to define the packing ring as providing a bearing surface for the shaft. Upon submitting such an amendment, the Examiner did acknowledge that he would view this as favorable in that the Hebard and Greiman references would no longer be applicable against such a claim.

During the personal interview, the Examiner handed over to applicant and the undersigned an Office Communication indicating that a protest is being transmitted to the applicant, but has not been entered into the file pursuant to MPEP 1901.06. The contents of the protest was not discussed during the interview. Mr. Peavey indicated that his Group Director had advised him that the appropriate procedure was to turn over the original protest to the applicant.

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The procedure followed by the Examiner pursuant to MPEP 1901.06 is indeed correct. The MPEP at page 1900-8 provides as follows:

If the protest is submitted after the publication of the application or the mailing of a Notice of Allowance under 37 C.F.R. 1.133, whichever occurs first, it should not be entered into the application file. The applicant should be notified that the process is untimely and that it is not being entered in the application file. The handling of the protest will vary depending on the particular situation as follows.

A. Service of copy included.

Where the protest includes an indication of service of copy on the applicant, the original protest should be discarded.

B. Service of copy not included.

Where the protest does not include an indication of service, the duplicate copy of the protest (if present) should be discarded and the original protest papers should be sent to the applicant along with a notification on non-entry.

The application here published on June 12, 2003. Thus, based on these instructions and earlier publication of the application, non-entry of the protest and delivery to the applicant is as directed by the MPEP.

Applicant merely indicates his review of the letter of protest and enclosures. It is respectfully submitted that the indication of use of an element identified as a "throttle bushing" does not show or suggest applicant's bearing for providing sealing in the seal cavity together with the bearing function now emphasized more clearly in the amended and new claims.

Consistent with the discussion at the interview, applicants have amended claim 1 to emphasize the bearing surfaces based on the close fitting of the substantially rigid bearing member into the seal cavity. In view of this, applicant respectfully submits that the rejection of claim 1 as anticipated by Hebard is no longer applicable and should be withdrawn. Similarly, the rejection of claims 1, 5 - 6, 8 and 9 as anticipated by Greiman should also be withdrawn.

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By this Amendment, applicant has also deleted reference to the integral lantern ring formed by a groove in the outer wall and inner bore of the cylindrical bearing. Such a feature is not required to impart patentability to the more specifically defined bearing function and as such has been added by new claim 10 dependent on claim 1. New method claims 15 - 17 have also been added and are directed to the method of use of the rigid bearing element in the seal cavity to provide the additional bearing function.

Applicant further submits that a review of the Rinne reference whether considered alone, in combination with each other or in view of Zapalac showing a groove with an O-ring do not show or suggest providing a substantially rigid bearing member in a seal cavity in a rotary driven device. It is also noted that in Zapalac the O-ring is provided on a valve stem which is longitudinally slidable within the valve and not in a rotary mechanical device as claimed. Rinne uses various non-ferrous metal filled thermoplastic materials as sealing materials having various configurations formed into a wedge shape to reduce friction. Again, there is no teaching or discussion relating to providing a bearing surface in a seal cavity in a rotary mechanical device.

In view of the amendments to claim 1 emphasizing the bearing function, applicant respectfully submits that claims 1 - 9 as amended and new claims 10 - 15 are not shown or suggested by the Hebard, Greiman and Rinne prior art whether considered alone or in combination. The same is true with respect to the additional references to Ellis, Johnson, Isoyama, Langmyhr, Fessmann, Burgess and Derian, whether considered alone or in combination with Hebard and/or Greiman. Accordingly, applicant respectfully submits that all the claims in the application are now in condition for immediate allowance.

As reviewed with the Examiner during the personal interview, applicant also wishes to rely on the commercial success of the sealing system as claimed as evidence of non-obviousness. The Court of Appeals for the Federal Circuit has recognized this as objective evidence when there is a nexus between the successful product and the claimed invention. Here, there is little doubt of that connection.

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The claimed bearing devices in most cases are retrofit into existing rotary devices and pumps and as such are custom made in order to meet the limitations of being closely fit within the seal cavity about the rotating shaft. Applicant notes that the product has been extremely well received in the industry, albeit a relatively small segment of the economy. Thus, the absolute dollar value may not be significant, but the success to a small entity is overwhelming.

In this respect, a catalog sheet showing the various configurations of the bearing element used to form the claimed sealing system is annexed to the accompanying Declaration of Commercial Success of Mark R. Wilkinson.

Evident of the success of the item may best be considered by looking at initial sales to a large number of customers, many being huge industrial corporations. The success of the product demonstrating its commercial success is shown by the overwhelming reorder history since filing the application. For example, one customer identified in Mr. Wilkinson's Declaration as No. 21 initially purchased seven units, two for each of three locations and one at another. Since the initial delivery, that same customer has reordered eighty-six units, including forty at the one location having initially ordered a single unit. Several other customers have reordered between forty and sixty units based on initial orders of one, two, three units.

All these initial sales and the reorders have taken place since filing of the application in January 2002. This is just over a one and one half year period of time.

In, Bose Corp. v. JBL, Inc., 112 F.Supp. 2d 138, 155 (D.Mass. 2000) the Court found that plaintiff "did experience great commercial success with its products incorporating the invention" when the patentee's sales "increased significantly - over one third - in the year after the patented product was introduced ..."

Consistent with this, applicant's success can be measured by the overwhelming reorder rate he has experienced since introduction. From customers initially ordering 68 units, they have reordered 721 units within the period since filing the application -- more

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than a ten-fold reorder rate. Surely, this is the strongest evidence of commercial success and supports the view that the claimed bearing satisfies a long felt need in the art.

In view of the amendments presented herewith and the discussion at the interview distinguishing applicant's claimed bearing from the prior art and the overwhelming commercial success evidenced by the Declaration of Mark R. Wilkinson, applicant respectfully submits that claims 1 - 15, all the claims now in the application are indeed patentable and in condition for immediate allowance. Accordingly, the Examiner is respectfully requested to reconsider the application at an early date with a view towards issuing a favorable action thereon. If upon review of the application, the Examiner is unable to issue an immediate Notice of Allowance, the Examiner is respectfully requested to telephone the undersigned attorney with a view towards resolving the outstanding issues.

Early and favorable action is earnestly solicited.

Respectfully submitted,

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